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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/595,951	06/16/2000	Lin Hongy	5608-128	2917

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EXAMINER
NGUYEN, DONGHAI D

ART UNIT	PAPER NUMBER
3729	

DATE MAILED: 03/18/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 09/595,951	Applicant(s) HONGY ET AL.	
	Examiner Donghai D. Nguyen	Art Unit 3729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 January 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *13-42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *13-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☒ The proposed drawing correction filed on *23 January 2003* is: a)☒ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Election/Restrictions

1. Applicant's election without traverse of Group I invention (claims 13-42) in Paper No. 5 is acknowledged. Thus, claims 1-12 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention (Group II, claims 1-12), there being no allowable generic or linking claim.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 13-17, 22, 25-29, 32-36, 38, 39, 41, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,183,136 to Colla (Applicant is referred to paragraph 10 of the last Office Action, dated August 23, 2002).

4. Claims 18, 19, and 37, are rejected under 35 U.S.C. 103(a) as being unpatentable over Colla in view of US 4,803,345 to Hoshizaki et al (Applicant is referred to paragraph 11 of the last Office Action, dated August 23, 2002).

5. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Colla in view of US 5,492,653 to Hochheimer et al (Applicant is referred to paragraph 12 of the last Office Action, dated August 23, 2002).

6. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Colla in view of Hochheimer et al. to claims 20 above, and further in view of US 5781402 Fujiyama et al (Applicant is referred to paragraph 13 of the last Office Action, dated August 23, 2002).

7 Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Colla in view of US. 4,306,217 to Solow (Applicant is referred to paragraph 14 of the last Office Action, dated August 23, 2002).

8. Claims 24 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colla in view of US .5,429,657 to Glicksman et al (Applicant is referred to paragraph 15 of the last Office Action, dated August 23, 2002).

Response to Amendment

9. The applicant's amendment filed on January 23, 2003 in Paper No. 5 has been fully considered and made of record.

Response to Arguments

10. Applicant's arguments filed on January 23, 2003 have been fully considered but they are not persuasive.

Regarding to Applicant's argument in paragraph 5, 6, and 9 under the Remark section, Applicant argues that the applied prior art does not including a bonding agent. Examiner disagrees with Applicant's argument. Colla discloses a bonding substance (col. 2, lines 21-27) and a noble-metal-based bonding agent "film material" (Col. 6, lines 17-22). Examiner directs Applicant to Fig. 5 which shows a conductor (6) which is bonded to tab (7 which is "precious metal conductors" in Col. 4, lines 5-7) by noble-metal-based bonding agent "ink material" (col. 6, lines 7-10) for "intimately bonding a suitable precious metal to the end of the grid [conductor

(6)]" (Col. 4, lines 12-16). Applicant argues that the noble metal is taught as being the terminal plate, not a bonding agent. Examiner disagrees because the terminal plate is precious metal conductor in the ink material, which contains bonding agent for bonding metal conductor to the end portion of nickel wire. Applicant also said Colla's invention could not be used in place of the claimed invention because it could not withstand the high temperatures necessary for injection molding. Examiner disagrees; Colla's invention can be used as a heater because the conductor (6) can be used as a heater element. The used of the heater has no weight in the claim invention and the operation of the heater at high temperature is not in the claim language. Thus, the examiner maintains the rejection as to merits of Colla.

3. In response to applicant's argument that Colla is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the method of terminating thick film, which involve affixing a terminal plate to each end portion of a conductive wire.

4. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the terminal plates are stainless steel or the method to use the invention) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Regarding paragraph 7 under Remark section, Applicant argues Hochheimer does not teach ink based bonding agent comprising of silver and silver composition is not used for bonding. Examiner disagrees; Hochheimer discloses the silver agent has a good green strength and bonding (Hochheimer's Abstract). The examiner maintains the rejection as to merits of Colla and Hochheimer.

Regarding paragraph 8, Applicant argues that Fujiyama et al. do not teach of a way to strengthen the bond between a thick film and metal. Examiner disagrees; Fujiyama et al. teaches the improving of bonding and electrical reliability between metal "solder" and thick film electrode (Col. 2, lines 7-8).

Regarding Applicant's argument in paragraph 10, Examiner disagrees because the noble-metal-based substance having a melting point at least 900 degrees Celsius (col. 3, lines 62-65).

5. In response to applicant's argument that Glicksman is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the Glicksman's invention is to create a bonding substance (col. 1, lines 20-26) that uses in Applicant's method of terminating a thick film.

6. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donghai D. Nguyen whose telephone number is (703) 305-7859. The examiner can normally be reached on Monday-Friday (9:00-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (703) 308-1789. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7307 for regular communications and (703) 305-3579 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

PETER VO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700

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March 14, 2003